

# The Development of New Less Lethal Technologies

Police Service of Northern Ireland  
November 2011



# Overview

- Possible Future Technologies
  - Short term
  - Medium term
  - Long term

Future Projects – CAST Brainstorming Event

# New and Emerging Technologies will need to:

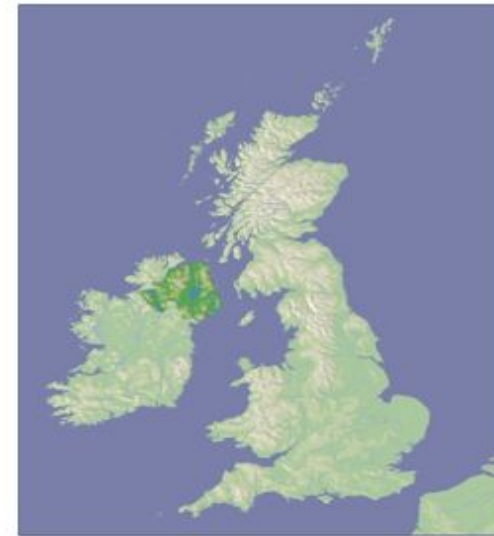
- Meet an Operational Gap or Need
- Follow the HO Codes of Practice
- Be assessed against the Police Operational Requirement
- Be introduced with an understanding of Operational and Medical implications of use
- Recognised as one of the most robust systems in the world

# 'Patten Report'

September 1999

- Recommendation 69
  - An immediate and substantial investment should be made in a research programme to find an acceptable, effective and potentially less lethal alternative to the Plastic Baton Round (PBR)
- Recommendation 70
  - The police should be equipped with a broader range of public order equipment than the RUC currently possess, so that a commander has a number of options at his/her disposal which might reduce reliance on, or defer resort to, the PBR

A NEW BEGINNING:  
POLICING IN NORTHERN IRELAND



THE REPORT OF THE INDEPENDENT COMMISSION  
ON POLICING FOR NORTHERN IRELAND

[http://www.nio.gov.uk/a\\_new\\_beginning\\_in\\_policing\\_in\\_northern\\_ireland.pdf](http://www.nio.gov.uk/a_new_beginning_in_policing_in_northern_ireland.pdf)

  
**Home Office**

# UK-wide Steering Group

- Established June 2000, tri-department
- Phase 1 (defining operational objectives and literature review)
- Phase 2 (Evaluation)
- Phase 3 (research)
- Phase 4 (operational objectives and public order equipment)
- Fifth Report

PATTEN REPORT RECOMMENDATIONS 69  
AND 70 RELATING TO PUBLIC ORDER  
EQUIPMENT

Apr 2001

A Paper prepared by the Steering Group led by the  
Northern Ireland Office

PATTEN REPORT RECOMMENDATIONS 69 AND  
70 RELATING TO PUBLIC ORDER EQUIPMENT

Dec 2001

A RESEARCH PROGRAMME INTO ALTERNATIVE  
POLICING APPROACHES TOWARDS THE  
MANAGEMENT OF CONFLICT

This is the Second R  
the Northern Ireland  
Chief Police Officers

PATTEN REPORT RECOMMENDATIONS 69 AND 70  
RELATING TO PUBLIC ORDER EQUIPMENT

A RESEARCH PROGRAMME INTO ALTERNATIVE  
POLICING APPROACHES TOWARDS THE  
MANAGEMENT OF CONFLICT

Dec 2002

This is the Third Report prepared by the Steering Group led by the  
Northern Ireland Office  
Police Officers

PATTEN REPORT  
RECOMMENDATIONS 69 AND 70  
RELATING TO PUBLIC ORDER EQUIPMENT

A RESEARCH PROGRAMME  
INTO ALTERNATIVE POLICING APPROACHES  
TOWARDS THE MANAGEMENT OF CONFLICT

Jan 2004

THIS IS THE FOURTH REPORT PREPARED BY THE STEERING GROUP LED BY THE  
NORTHERN IRELAND OFFICE, IN CONSULTATION WITH THE ASSOCIATION OF CHIEF  
POLICE OFFICERS  
JANUARY 2004

Home Office

# Less Lethal Weapons

## UK METHODOLOGY

- Develop Operational Requirement;
- Evaluate COTS products;
- Modify/Develop if necessary;
- Establish Guidelines for use;
- Perform Medical Assessment;
- Independent Review by Medics/Ministers;
- Operational Trial;
- Full Deployment;
- Monitoring and Feedback.

# Discriminating Irritant Projectile (DIP) Requirements:

- Operational range
  - 1-25m (essential), 1-40m (highly desirable), 1-65m (desirable)
  - Essential that the irritant is not discharged during flight
  - Desirable that on impacting the target all of the irritant is discharged
- Weapon system / sights
  - Not defined but likely to be limited by ISD and costs to L104/L18
  - Desirable to have single sight setting
  - *'Desirable to have common zero with AEP'*
- Accuracy
  - Essential - 25m, 85% probability impact on target 400mm wide x 600mm high
  - Highly desirable – 40m, 85% probability impact on target 400mm wide x 600mm high
  - Desirable – 65m, 85% probability impact on target 400mm wide x 600mm high

# Short Term: Counter Laser Dazzle



Filters  
Goggles  
Shields  
Visors  
'reactolite lens'





# Brainstorming Session 11<sup>th</sup> October

- Following the UK wide public disorder and crime in the summer public and industry enthusiastically forwarded suggestions to the Home Office
- Ideas were provided on how the police could deal with similar situations in the future.
- This correspondence was effectively highlighting gaps in Operational Capability.
- CAST proposed a brainstorming session to expand on this.

# Brainstorming Session 11<sup>th</sup> October

- - Invited Participants from:
  - Police – including PSNI and MPS
  - Home Office Policy units
  - Scientists and Engineers from CAST and dstl
  - SOCA
  - Police Federation
  - Relevant ACPO committees (POPS, SDAR, and APG)

# Brainstorming Session 11<sup>th</sup> October

- - Questions
  - What would make the police's job easier or safer in quelling or dispersing violent groups?
  - What would help the police more quickly and effectively identify offenders for later prosecution?
  - How can the police gather and use (social media) intelligence to increase their effectiveness.

# Brainstorming Session 11<sup>th</sup> October

- - Format
  - Overview of the policing problem from MPS and PSNI
  - Breakout groups with facilitators
  - Silent brainstorming followed by discussion of ideas
  - No ideas too stupid or 'off the wall' to consider
  - Grouping of ideas
  - Prioritisation at Plenary session

# Brainstorming Session Recommendations

- To identify or develop a system capable of monitoring and displaying the positions of police officers during disorder.
- Officer to Officer 'on ground' communications.
- To identify or develop quick and field-able methods of uniquely marking and identifying offenders for prosecution.
- To review the POR for public-order and assess new technologies such as acoustic, directed energy and laser dazzle against that requirement.
- To identify or develop tools that can collate data from social media or open sources and quickly and reliably predict disorder

# Sanity Check

- Presentation of recommendations to expert stakeholder groups
- PSNI (Today)
- ACPO TTEWG (Today, Cardiff)
- ACPO POPS (5<sup>th</sup> Dec)
- UK LLW Steering Group (7<sup>th</sup> Dec)
- MPS (15<sup>th</sup> Dec)

# Questions and Views

- Other Technologies or Techniques
  - We would value your input or views on the technologies presented today and also any comments or ideas on technologies you have seen that you think may be of benefit.
- Your input and comment on the recommendations from our recent Brainstorming event would also be welcomed

# Less Lethal Options: Current and Future Technologies

